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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/001,348	10/31/2001	· Dean R. Potts	99-633	2204	
719	7590 08/12/2003				
CATERPILLAR INC. 100 N.E. ADAMS STREET PATENT DEPT.			EXAMINER		
			SINGH, SUNIL		
PEORIA, IL	010290490		ART UNIT	PAPER NUMBER	
			3673		
			DATE MAILED: 08/12/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application No. Applicant(s)		//				
		10/001,348	<u></u>	Potts	- THE REPORT OF THE PARTY OF TH			
		Examiner Sunil Singh		Art Unit 3673				
	The MAILING DATE of this communication appears	on the cover sheet wit	th the corres	spondence addre	288     XV			
A SHO	for Reply ORTENED STATUTORY PERIOD FOR REPLY IS SET MAILING DATE OF THIS COMMUNICATION.				V			
mailing If the p If NO p Failure Any re	sions of time may be available under the provisions of 37 CFR 1.136 (a). In a date of this communication, period for reply specified above is less than thirty (30) days, a reply within the period for reply is specified above, the maximum statutory period will apply to reply within the set or extended period for reply will, by statute, cause the ply received by the Office later than three months after the mailing date of a patent term adjustment. See 37 CFR 1.704(b).	the statutory minimum of thirty and will expire SIX (6) MONTH the application to become ABAN	(30) days will be IS from the mailir NDONED (35 U.S	pe considered timely. ing date of this commu S.C. § 133).	1			
Status	- v v v v v v v v v v v v v v v v v v v							
1) 🗆	Responsive to communication(s) filed on				•			
2a) 💢	This action is <b>FINAL</b> . 2b) ☐ This ac	ction is non-final.						
	Since this application is in condition for allowance closed in accordance with the practice under Ex pa	•			e merits is			
· ·	tion of Claims		ieları	dina in the	!:+!			
	Claim(s) <u>1-23 and 26</u>							
	4a) Of the above, claim(s)							
5) 🗆	Claim(s)			is/are allowed.				
6) 💢	Claim(s) 1-3, 10-14, and 20-23			is/are rejected.				
7) 💢	Claim(s) 4-9, 15-19, and 26			is/are objected	to.			
8) 🗆	Claims	are subje	ct to restric	ction and/or ele	ction requirement.			
Applica	ition Papers							
	The specification is objected to by the Examiner.							
10)□	)) ☐ The drawing(s) filed on is/are a) ☐ accepted or b) ☐ objected to by the Examiner.							
_	Applicant may not request that any objection to the	· · · · · · · · · · · · · · · · · · ·						
11)💢	11) $\square$ The proposed drawing correction filed on <u>May 19, 2003</u> is: a) $\square$ approved b) $\square$ disapproved by the Examiner							
_	If approved, corrected drawings are required in reply							
12)□	The oath or declaration is objected to by the Exam	niner.						
	under 35 U.S.C. §§ 119 and 120		= 110/					
13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
	☐ All b)☐ Some* c)☐ None of:							
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No.							
	<ol> <li>Copies of the certified copies of the priority of application from the International Bure ee the attached detailed Office action for a list of the</li> </ol>	eau (PCT Rule 17.2(a)	)).	this National S	Stage			
_	Acknowledgement is made of a claim for domestic	· ·		(e).				
_	The translation of the foreign language provision							
_	Acknowledgement is made of a claim for domestic							
Attachm	ent(s)							
1) No	otice of References Cited (PTO-892)	4) Interview Summary (F	PTO-413) Paper	No(s)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  5) Notice of Informal Patent Application (PTO-152)								
3) inf	formation Disclosure Statement(s) (PTO-1449) Paper No(s).	6) Other:						

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 10, 20-22 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 line 3, "a motor" is recited; claim 10 line 7, "said vibrator propel motor" is recited; it is unclear if they are related.

Claim 10 line 4, "a speed sensor ... said outer shaft" is recited; claim 9 recites the same subject matter. Such language appears to be redundant.

Claim 20 line 2, "a pinion gear" and "phase motor" are called for. Claim 16 calls for a "pinion gear" and "phase control device"; it is unclear how they are related. It appears as if claim 16 should of depended from claim 15.

Claim 21 is confusing because claim 21 line 3, "said through shaft" lacks clear antecedent basis.

Claim 21 line 3, "a motor" is recited; claim 21 indirectly depends from claim 12, claim 12 calls for a "motor" it is not clear if they are related. Further confusion is introduce because the "motor" called for in claim 12 is not the same "motor" used to rotate the "pinion gear". The phase control

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device (which can be a phase motor, handwheel or linear rack actuators) is used to rotate the "pinion gear" inorder to index the second eccentric weight relative to the first eccentric weight.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-3, 11, 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Wall (US 4152943).

Wall discloses a work machine comprising a compacting drum (see col. 1 line 7), a vibratory mechanism (see Figs. 1-3) that includes a first eccentric weight (34) and inner shaft (36), a second eccentric weight (28,14,14a) and outer shaft (16,16a,20,20a), a gear box (12), said gear box adapted to index said second eccentric weight relative to said first eccentric weight, a motor (see col. 3 line 20) connected to the gear box, the gear box has first and second planetary arrangements (see col. 3 lines 6-10, 24-26), the phase control device is a handwheel (see Fig. 1).

With regards to claim 23, the recited method steps are considered inherent to the use of the apparatus disclosed by Wall.

5. Claims 1-3, 11, 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Goehler et al. (US 4454780).

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Goehler et al. discloses a work machine comprising a compacting drum (see abstract line 2), a vibratory mechanism (see Figs. 1,1a,2) that includes a first eccentric weight (60) and inner shaft (58,58'), a second eccentric weight (54) and outer shaft (32,50), a gear box (14), said gear box adapted to index said second eccentric weight relative to said first eccentric weight, a motor (36) connected to the gear box, the gear box has first and second planetary arrangements (66,68), the phase control device is a handwheel (78).

With regards to claim 23, the recited method steps are considered inherent to the use of the apparatus disclosed by Goehler et al.

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wall or Goehler et al. in view of Swanson et al. or Staffenhagen et al. (US Pub. 2003/0021629 A1, 2002/0172556 A1).

Wall and Goehler et al. both disclose the invention substantially as claimed. However, they both are silent about a first power source (hydraulic/electric) connected to a propel motor and a second power source (hydraulic/electric) connected to the vibratory motor. Swanson et al.

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and Staffenhagen et al. both teach a first power source (hydraulic/electric) connected to a propel motor and a second power source (hydraulic/electric) connected to the vibratory motor. It would have been considered obvious to one of ordinary skill in the art to modify either Wall or Goehler et. to include the above teachings of a first power source (hydraulic/electric) connected to a propel motor and a second power source (hydraulic/electric) connected to the vibratory motor as taught by either Swanson et al. or Staffenhagen et al since such an arrangement allows the operator of the working machine to easily control the amount of vibration delivered to the soil.

#### Response to Arguments

8. Applicant's arguments filed 5/19/03 have been fully considered but they are not persuasive. Applicant argues that Wall does not teach a gearbox (12). Such an argument is not concurred with. According to Webster's Ninth New Collegiate Dictionary, "gearbox" is defined as gearing, to which examiner turned to the same reference for the definition of "gearing" which reads as follows the parts by which motion is transmitted from one portion of machinery to another. Therefore Wall teaches gearbox (12) since this houses member 44 which is splined to member 16 and 36 which are part of the outer and inner shafts that are connected to the second and first eccentric weights.

Applicant argues that Goehler et al. '780 does not teach a gearbox (14). Such an argument is not concurred with. According to Webster's Ninth New Collegiate Dictionary, "gearbox" is defined as gearing, to which examiner turned to the same reference for the definition of "gearing" which reads as follows the parts by which motion is transmitted from one portion of

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machinery to another. Therefore Goehler et al. teaches gearbox (14) since this houses gearing mechanism (see col. 2) which provides splined relationship of the outer and inner shafts that are connected to the second and first eccentric weights and also provides indexing means.

## Allowable Subject Matter

- 9. Claims 4-9,15-19 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 10. Claims 10, 20-22 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 11. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

#### Conclusion

12. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR

1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

will the statutory period for reply expire later than SIX MONTHS from the mailing date of this

final action.

13. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Sunil Singh whose telephone number is (703) 308-4024. The examiner can

normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Heather Shackelford, can be reached on (703) 308-2978. The fax phone number for the

organization where this application or proceeding is assigned is (703) 30872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 308-2168.

Sunil Singh

Patent Examiner

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